### **TCO METRICS SUMMARY INFORMATION**

Agencies and institutions of higher education within the executive branch of state government have made significant progress in conducting TCO evaluations. The Seat Management Section has TCO evaluations and the corresponding metrics for the TCO study method selected on file for thirty-seven (37) agencies and eight (8) institutions of higher education. It should be noted that the Governor's Office TCO evaluation includes the Governor's Office and the Governor's Cabinet.

Forty-five (45) agencies and institutions of higher education have met all the TCO reporting requirements specified by the Secretary of Technology. Twenty-four (24) agencies and one (1) institution of higher education used the Gartner TCO model for distributed computing environments, one (1) agency used an industry recognized compatible TCO model, and twelve (12) agencies and seven (7) institutions of higher education used internally developed TCO methodologies.

Organizations that submitted evaluations that do not meet all of the TCO reporting criteria specified by the Secretary of Technology are not included in the materials presented in this report.

The forty-five (45) agencies and institutions of higher education represent a total of 27,231 end users with the following assets identified through TCO evaluations:

- 24,949 desktop computers
- 4,530 portable computers
- 1,077 servers
- 17,665 peripherals (almost all printers)
- 2.568 network devices

Significant differences exist between the TCO metrics reporting requirements for the three (3) TCO study approaches available to agencies and institutions of higher education. Valid analysis of the enterprise TCO benchmark data can only be accomplished using input metrics from like methodologies.

# GARTNER TCO MODEL FOR DISTRIBUTED COMPUTING ENVIRONMENTS

The twenty-four (24) agencies and one (1) institution of higher education that used the Gartner model represent a statewide total cost of ownership of

\$26,016,390 for 3,338 end users. The Table 1 shows the average TCO per end user per year for these agencies compared to the Gartner worldwide database average (as of 9/12/2001).

These organizations average 58.55 end users for each allocated IT operations staff person and 18.47 end users per server.

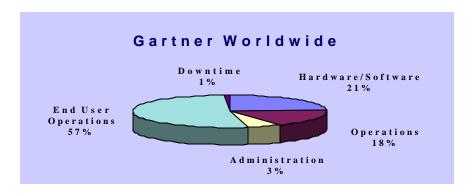
These averages provide the Seat Management Section and the Commonwealth with the assurance that Virginia TCO evaluation results are consistent with others using the Gartner model.

An additional reality check for Virginia is the cost distribution of the direct and indirect cost categories in the Gartner model for the Commonwealth versus cost distribution results from the Gartner worldwide database.

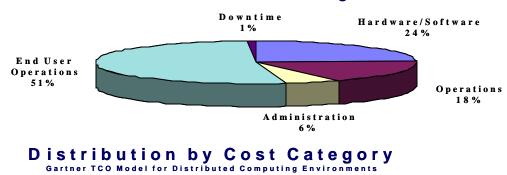
TCO Average Costs  Gartner TCO Model and SMS Data Collection Assumptions		
Average TCO per End User	\$7,794 <sup>1</sup>	\$9,699 <sup>2</sup>
Major Cost Categories		
<b>Hdware/software Costs</b>	1,840	1,987
<b>Operations Costs</b>	1,356	1,663
Admin Costs	431	325
<b>End User Oper Costs</b>	4,112	5,344
Downtime -	53	87

<sup>&</sup>lt;sup>1</sup> Based on 24 state agencies and 1 institution of higher education with 3,338 end users

<sup>&</sup>lt;sup>2</sup> Gartner worldwide database average as of September 12, 2001



#### Commonwealth of Virginia



## COMPATIBLE MODEL TO THE GARTNER TCO MODEL FOR DISTRIBUTED COMPUTING ENVIRONMENTS

One agency submitted a TCO evaluation and metrics that were developed using an industry recognized compatible model to the Gartner TCO Model for Distributed Computing Environments.

## **INTERNALLY DEVELOPED TCO MODELS**

Twelve (12) agencies and seven (7) institutions of higher education have submitted TCO evaluation reports and TCO metrics that were created using internally developed TCO methodologies. Several of these state agencies have requested or are receiving assistance from the Seat Management Section to complete a TCO evaluation using the Gartner TCO Model for Distributed Computing Environments.